



(19)

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(11)

**EP 0 979 636 A3**

(12)

**EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
14.06.2000 Bulletin 2000/24

(51) Int. Cl.<sup>7</sup>: **A61B 17/15, A61B 17/02**

(43) Date of publication A2:  
16.02.2000 Bulletin 2000/07

(21) Application number: 99306323.9

(22) Date of filing: 10.08.1999

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE**  
Designated Extension States:  
**AL LT LV MK RO SI**

(30) Priority: 11.08.1998 US 132279

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(54) **Femoral ligament tensing and prosthesis sizing device**

(57) A tool for preparing a bone end for prosthetic joint replacement. The tool rests on a resected end of one bone of an articulating joint set, and includes a jack assembly for supporting an opposing bone of the set in flexion while the bone ends remain attached together by ligaments. The jack pivotally supports the opposing bone and raises it to the spacing of the intended prosthesis to allow the surgeon to balance soft tissue tension. This support allows the bone to rotate under the tension of the connecting ligaments, into natural alignment while a template carried by the jack assembly lies against the prepared end, so subsequent cuts are in correct rotational alignment and the bone enjoys a natural posture when the joint components are attached. Preferably, a sizing jig in the tool contacts the bone to determine an offset, and a positioning block coupled to the sizing jig confirms the size, and positions drill holes on the bone surface contacted by the jig to set the orientation for attaching a cutting block. The sizing jig may include a template for indicating the size of a required joint component, and the jack may support the bone on an intramedullary rod. In one embodiment, the jack moves a gimbaled assembly which fits about the intramedullary rod, allowing the template to rest flat against the resected bone end. Preferably, the device places drill holes in position for a cutting block to fit a femoral end component of a prosthetic knee.

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# EUROPEAN SEARCH REPORT

Application Number  
EP 99 30 6323

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| Place of search<br><b>THE HAGUE</b>  |   | Date of completion of the search<br><b>26 Apr11 2000</b>   | Examiner<br><b>Vere1st, P</b>                |
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